LXXXII.—*On Mammals collected by C. Keysser in the Saruwaged and Rawlinson Mountains Region of N.E. New Guinea.* By Oldfield Thomas.

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By the kindness of Lord Rothschild I have had the opportunity of working out a number of mammals which were collected some years ago in the projecting eastern part of what was then German New Guinea by the Dutch Missionary, C. Keysser. The British Museum had never received any mammals at all from this region, while the few that have been recorded are themselves mostly from Mr. Keysser's collections, determined, and in some cases described, by Prof. F. Förster, sometimes in conjunction with Lord Rothschild.

The present collection is mostly from the great mountain mass known as the Saruwaged Mountains, of which the better-known Rawlinson Mountains are said to be mere outliers.

But from the mammal point of view, the Saruwaged and Rawlinson Mountains are almost equally unworked, so that the present collection is of very great interest, and adds materially to our present imperfect knowlege of New Guinea mammals.

1. *Mallomys hercules*, Thos.

♂, R.M. 9. Saruwaged Mts.

Only the second known specimen of this fine rodent, the first, the type, having been given to the Museum by Lord Rothschild in 1912.

2. *Anisomys imitator*, Thos.

♂, R. 22 (imm.). No exact locality.

3. *Stenomys rufulus*, sp. n.

R.M. 18, 19. Saruwaged Mts., 4000 m., August 1914.

A small species of a reddish colour.

Size and essential characters as in *S. niobe*, but colour strongly rufous. Upper surface uniform strong cinnamon-brown, sides scarcely paler, under surface sayal-brown, the hairs slaty for about two-thirds their length. Head and ears quite like body. Hands and feet darker brown. Tail apparently shorter than in *niobe*, but doubtfully perfect in the type.

Skull apparently as in *niobe*, the supraorbital edges smoothly

rounded. No tendency to the peculiar cranial inflation of *S. arrogans*.

Dimensions of the type (measured on skin) :—

Head and body 122 mm.; tail (doubtfully perfect) 106; hind foot (wet) 27; ear 16.

Skull: greatest length 33·5; condylo-incisive length 30; nasals 12·6; interorbital breadth 5·8; breadth of brain-case 14·2; zygomatic plate 2·4; palatilar length 14·8; palatal foramina 4·9; upper molar series 5·7.

Hab. Saruwaged Mts., 4000 m. "From the highest point."

Type. Adult female. Original number 18. Collected August 1914 by C. Keysser. Presented by Lord Rothschild. Two specimens.

The strong cinnamon colour of this mountain-rat is peculiar to it, all the other species being of a dark brown.

The members of the genus *Stenomys* are characteristic of the New Guinea mountains, and are often the only Muridæ to be found at the higher altitudes. The present one, from 13,000 feet, occurs at a greater height than any as yet recorded.

4. *Pogonomys sylvestris*, Thos.

Two specimens. Rawlinson Mts., June 1911.

Described on these examples in 1920.

5. *Macropus keysseri lanatus*, subsp. n.

♂, R.M. 8 (Keysser No. 24), 10 (young). Saruwaged Mts., 3000–3800 m., August 1914.

♀, R.M. 6, 7, 14. Saruwaged Mts., 3000–3800 m., August 1914.

Essential characters as in *keysseri* of the Bulung region, but the fur much thicker, longer, and more woolly (hairs of hind back nearly 40 mm.), while the colour, instead of being nearly uniformly dark brown (face, nape, and back), is marked by there being a distinct nuchal mantle of lighter brown hairs separating the blackish crown from the dark brown back. General colour of back near "cinnamon-brown," the lighter tone, as compared with *keysseri*, being due to the greater development and prominence of the more or less cinnamon and very woolly underfur. Under surface much more strongly ochraceous than in *keysseri*, approaching "ochraceous-tawny." Tail more heavily clothed than in *keysseri*, well-haired throughout; bicolor, the upper side dark brown, the lower dull buffy whitish.

Skull quite as in *keysseri*.

Dimensions of the type (measured on skin) :—

Head and body 700 mm.; tail 420; hind foot (wet) 136; ear (wet) 54.

Skull: greatest length 110; condylo-basal length 108; zygomatic breadth 58; nasals 41 × 17·5; intertemporal breadth 12·6; palatal length 66; length of p^4 7·2; combined length of ms^{1-3} * 18·5.

Hab. as above.

Type. Adult male. Original number 8 (Keysser number 24). Collected August 1914.

This Kangaroo, as is shown by its skull, is evidently nearly allied to *M. keysseri*, of which it would appear to be a high-altitude race, distinguished by its long woolly fur and somewhat different colour.

In making this comparison I have had, by Lord Rothschild's kindness, the advantage of examining the type, an old male, of *M. keysseri*, which was collected by Mr. Keysser in the Bulung region, inland of the Huon Gulf, at an altitude of about 1800–2000 m.

* In describing this and other Marsupials of the present collection, my attention has again been drawn to the inconvenience systematic workers suffer from the present absence of a common nomenclature of the teeth. This absence is largely due to my own desertion of the ancient Marsupial formula of P. 3, M. 4, on account of its being possibly erroneous. For the correct formula was by some authors thought to be P. 4, M. 3, as in other mammals, the seven postcanine teeth being then serially and individually homologous with each other in the two groups. This latter was the view taken in a paper on the nomenclature of the teeth published in 1905 †, and since that date I have not ventured definitely to assign any Marsupial cheek-tooth to its serial place, and in giving descriptions and measurements I have used words, such as "molariform tooth," correct on either theory.

Now, however, on reviewing the whole subject, it seems to me that it would be better to revert to the old notation, that used in the 'Catalogue of Marsupials,' until such time as more definite proof is brought forward of the incorrectness of this notation.

The four premolars, with the last changing, of the Mesozoic *Triconodon*, not to mention the four present in the abnormal *Phascogale* on which I largely based my 1887 ‡ paper, seem to me to speak very strongly in favour of the old view, even if some arguments may be found against it.

I therefore now propose, in systematic descriptions, to revert to the Catalogue notation, with the secator reckoned as p^3, and the "three anterior molariform teeth" called, as in that work, m^1–m^3.

The paper of 1892 § would, therefore, again fairly represent the views I now hold on the various theories which have been put forward in regard to the subject of Marsupial tooth-homologies.

† P. Biol. Soc. Wash. xviii. p. 194 (1905).

‡ Phil. Trans. 1887, p. 443.

§ Ann. & Mag. N. H., April 1892, p. 308.

Matschie's *Thylogale lauterbachi*, on the other hand, also from this part of New Guinea, seems to be a low-country form, with short fur only 15 mm. in length. A skin of it, without skull, was obtained by Mr. Keysser on the Sattelberg.

6. *Macropus keysseri lauterbachi*, Matsch.

♀, R. 6. Sattelberg, May 1907.

7. *Dendrolagus matschiei*, Först. & Rothsch.

Young, R.M. 11. Saruwaged Mts., 2000 m., August 1914.

8. *Dorcopsulus* * *rothschildi*, sp. n.

♀, R. 5. Rawlinson Mts.

♀, R.M. 3, 15, 20. Saruwaged Mts., 3000 m., August 1914.

Fur very long, soft, and glossy; hairs of back about 35 mm. in length. General colour above dark shining chocolate-brown, near "Mars-brown," not the more smoky greyish brown of *D. vanheurni*, bases of hairs greyer. Under surface dull whitish brown, the belly browner, the chest and inguinal region lighter. Face quite like back. Ears thickly haired, dark brown, their inner surface lighter. Outer side of limbs and hairy part of tail uniformly dark brown.

Skull rather larger than that of *vanheurni*, smaller than that of *macleayi*. Nasals less projecting mesially beyond the maxillo-frontal suture than in either of the other species, their hinder edge nearly transverse; secator rather shorter than in the other species, the four specimens available having this tooth 8·8, 7·6, 8·4, 8·5 mm. in length as compared with 9·8, 9·9 in *macleayi* and 9·2 in *vanheurni*.

Dimensions of the type (measured on the skin):—

Head and body 480 mm.; tail 270; hind foot 94; ear 34.

Skull: greatest length 85; condylo-basal length 80·5; zygomatic breadth 42·5; palatal length 48; palatal foramina 3·8; length of secator 7·7; combined length of ms^{1-3} 12·4.

Hab. of type. Saruwaged Mts., 3000 m.

Type. Adult female. Original number 20. Collected August 1914.

This well-marked species is decidedly browner and less

* With some hesitation I accept Matschie's separation under the above name of the *macleayi* group of *Dorcopsis*, on account of the short muzzle of the skull, the less elongate secator, which only just equals m^1+m^2 instead of m^1+m^2+half m^3, and the more extended and abrupt nakedness of the tail.

smoky grey than either of the other two members of *Dorcopsulus*, its fur is much longer than that of *macleayi*, rather longer than that of *vanheurni*, its nasals are less projected backwards, and its secator is comparatively short. I have named it in honour of Lord Rothschild, to whom the National Museum is indebted for the fine series of specimens in which it occurs.

9. *Ceonix maculatus*, Geoff.

2 ♂ and a separate head, R. 2, 3, and 4. Sattelberg.
♂, R. 1. Stephansort, *C. Wehnes*.

10. *Phalanger orientalis*, Pall.

2 ♀ and young, R. 8, 9, and 11. Rawlinson Mts., April 1907.

This represents Prof. Foerster's "*Pseudochirus vulpecula*," which he described as "eine kleiner Art aus der *albertisi*-Gruppe," of that very different genus, the young specimen, R. 11, in the well-known red juvenile phase, corresponding so closely to his description that it might almost be his type.

11. *Phalanger coccygis*, sp. n.

♂, R.M. 13 (Keysser No. 26). Saruwaged Mts., 3000 m., August 1914.

♂, R. 7, and another, no. 11. 10. 13. 1, already in the British Museum. Rawlinson Mts.

Nearly allied to *Ph. carmelitæ*, but larger and with a more defined dorsal stripe.

Size, as gauged by skull, distinctly larger than in *carmelitæ*, slightly larger than in *sericeus*. Fur thick, rich, longer than in *carmelitæ*, shorter than in *sericeus*. General coloration as in those species, the upper surface chocolate-brown, the under surface white, the hairs white to the roots. The dorsal colour is, however, rather darker than in *carmelitæ* without being of the glossy blackish of *sericeus*. A black median line perceptible on the fore back, not strongly defined, though more so than in either of the allied species. Tail with nearly half its length furry.

One of the two Rawlinson Mts. specimens has a number of whitish hairs mixed with the brown, but the other not.

Skull about as in *carmelitæ*, but larger; supraorbital ridges well marked.

Teeth as in *carmelitæ*, the small premolar between the secator and the anterior premolar present in both skulls, as it is in *carmelitæ*, while it is absent in our three skulls of

sericeus. And in the lower jaw, both in *carmelitæ* and *coccygis*, there are three small intermediate unicuspids, while there are only two in the three available specimens of *sericeus*.

Dimensions of the type (measured on the skin) :—

Head and body 515 mm.; tail 330; hind foot 51.

Skull: condylo-basal length 86; zygomatic breadth 53·7; nasals, length 33·6, least breadth 8, greatest breadth 14; intertemporal breadth 9; mastoid breadth 42; diagonal diameter of secator 5; combined length of ms^{1-3} 16·5.

Hab. Saruwaged Mts., alt. 3000 m.

Type. Adult male. Original number 26. Collected August 1914 by C. Keysser.

This species is no doubt very nearly allied to *Ph. carmelitæ*, but its larger size and the development of a dorsal line seem to justify its being given full specific rank, especially as the third chocolate-coloured cuscus, *Ph. sericeus*, proves to differ from both the other species by a permanent difference in the number of intermediate teeth present. This character is usually considered impermanent and untrustworthy, but is here constant through a series of 14 skulls of the three forms.

12. *Pseudochirus corinnæ argenteus*, Först.

♂, R.M. 5. Saruwaged Mts.

♂, R. 15. Rawlinson Mts.

Not sexed, R. 10. Rawlinson Mts., 1500 m., June 1911.

The last specimen appears to be the example of "*corinnæ*," which, by its unusually strong coloration, induced Prof. Förster to apply the rather unsuitable name of *argenteus* to a less rufous example.

South of the present region there seems to be a definable subspecies of this group, which may be called

Pseudochirus corinnæ cæcias, subsp. n.

Size rather smaller than in true *corinnæ*, and colour more reddish brown. General colour above, as compared with that of *corinnæ*, more umber-brown, the rump and base of tail near "Brussels-brown" or even approaching "hazel." Face "buffy brown" instead of "hair-brown." Otherwise the character of the markings, the dorsal black line, and the light ear-patches are all as in true *corinnæ*.

Skull smaller than in *corinnæ*; nasals less expanded behind.

Dimensions of the type (measured on skin) :—

Head and body 340 mm.; tail 275; hind foot 40.

Skull: greatest length 61; upper length 58; zygomatic

breadth 35·5 ; nasals 20·7 × 8·5 : interorbital breadth 77 ; palatal length 34 ; combined length of ms^{1-3} 12·2.

Hab. North-eastern slope of the dividing range of S.E. New Guinea. Type from the Upper Bagua River, Mambare River. Alt. 3000′.

Type. Adult female, B.M. no. 7. 5. 22. 8. Collected 28th September, 1906, and presented by C. A. W. Monckton, Esq.

Compared with five examples of the true *corinnæ*, from the Vanapa, Aroa, Brown, and Angabunga Rivers, all on the south-western slope of the dividing range, this *Pseudochirus* differs by its decidedly stronger and warmer coloration and the somewhat smaller size of its skull.

13. *Pseudochirus larvatus*, Först. & Rothsch.

♂, R. 12, 13, 14. Mountains inland from Huon Gulf.
♀, R.M. 16. Saruwaged Mts.

An interesting series of this very handsome and distinct species.

14. *Petaurus papuanus*, Thos.

R.M. 17. Saruwaged Mountains.

15. *Distæchurus pennatus neuhaussi*, Matsch.

R.M. 21. Saruwaged Mts.
R. 20. Rawlinson Mts. *Topotype* of *amœnus*.
R. 21. Sattelberg, June 1911. *Topotype* of *neuhaussi*.

In ignorance of Dr. Matschie's description of *D. neuhaussi* * (1916), I described *D. p. amœnus* † from the Rawlinson Mountains in 1920. But there is no doubt that the two are the same.

16. *Echymipera doreyana*, Q. & G.

♂, R. 18; ♀, R. 19. Stephansort, *C. Wehnes.*
♂, R. 17. Sattelberg, *C. Keysser.*

17. *Peroryctes rothschildi*, Först.

♂, R.M. 4, 12; young, 22. Saruwaged Mts., 2000 m., August 1914.
♀, R. 16 (young). Rawlinson Mts.

Prof. Förster described two species of this group in 1913 from the present region—*P. rothschildi* and *P. mainois*. In

* Mitth. Zool. Mus. Berl. viii. p. 292 (1916).
† Ann. & Mag. N. H. (9) vi. p. 537 (1920).

view, however, of the considerable variations in colour in this genus, and the alteration of characters due to age, I am not at present prepared to admit more than a single species as occurring in the Saruwaged Mountains. One of the adults, No. 4, has its fur profusely mixed with greyish white anteriorly, while No. 12 has no grey at all, and the general colour is far more rufous. Much more material is needed before any sound opinion on the number of species can be arrived at.

LXXXIII. — *The Generic Name of the Finless-backed Porpoise, formerly known as* Neomeris phocænoides. By Oldfield Thomas.

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The question of the proper treatment of misprints in generic names is one that bristles with difficulties, and needs most careful consideration in every case. Sometimes, when the misprinted name has been used in a perfectly valid form, it would seem that we ought to recognize it as having full status, in spite of its being obviously or presumably a misprint. This was the course I followed in renaming the *Dryomys* of 1906, because of the accidental use of that name (as a misprint for *Drymomys*) by Philippi six years before, and it has received the approval of later writers. When, however, the misprint is not, viewed simply by itself, strictly valid, for want of diagnosis or identifiable type-species, the name should be considered as having no status at all. This would, for instance, apply to Wallace's *Neotomys* of 1876, which antedates, but does not invalidate, my *Neotomys* of 1894.

Now, this question of misprints arises in the case of the Porpoise to which Gray applied the generic name of *Neomeris*, for that word proved to be invalid owing to its having been used earlier for an invertebrate, and in dealing with it Palmer, when preparing his great work on nomenclature, replaced it by *Neophocæna*, after quoting two other names which he set aside as misprints. His notice of *Neomeris*, abbreviated, is as follows (exact references are given in his 'Index Generum Mammalium,' p. 453, 1904):—

Neomeris, Gray, 1846, *nec* Lamouroux, 1816.
Meomeris, Gray, 1847.
Nomeris, Coues, 1890, and, finally,
Neophocæna, Palmer, 1899.